

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية
G.C.C STANDARDIZATION ORGANIZATION (GSO)

Final Draft

GSO 05/FDS/2011

حلوى النوجه (المرزبان)
Nougat Candy (Marzipan)

Prepared By
GSO Technical Committee for standards of food and agriculture products

This document is a draft GSO Standard circulated for comments. It is, therefore, subject to alteration and modification and may not be referred to as a GSO Standard until approved by GSO Board Of Directors

ICS:67.200

Nougat Candy (Marzipan)

**Date of Board of Directors’
approval** :

Issuing Status :

Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No (5) " Technical committee for standards of food and agriculture products" has prepared this Standard. The Draft Standard has been prepared by Sultanate of Oman .

This standard has been approved as a Gulf (Standard / Technical Regulation) by GSO Board of Directors in its meeting No.(),held on / / H , / / G.

NOUGAT CANDY (MARZIPAN)**1. SCOPE AND FIELD OF APPLICATION**

This GSO standard is concerned with nougat candy (marzipan)

2. COMPLEMENTARY REFERENCES

- 2.1 GSO 9 “Labelling of Pre-packaged Foods”.
- 2.2 GSO 150 “Expiration periods at food products”.
- 2.3 GSO 21 “Hygienic Regulations for Food Plants and Their Personnel”.
- 2.4 GSO/CAC 192 “General Standards of Food Additives”.
- 2.5 GSO 262” Methods of test for hard candy”.
- 2.6 GSO 1016 " Microbiological criteria for foodstuffs Part 1".
- 2.7 GSO 16 " Physical and chemical methods for testing edible vegetable oils and fats.
- 2.8 GSO 20 " Methods for the determination of contaminating metallic elements in food
stuffs ".
- 2.9 GSO Standard ON (Methods of Test for Halawa Tehenia Prepared from Sucrose
(El-Halawa El-Shamia).
- 2.10 GSO 134 "Methods of Test for Sugar - Physical and Chemical Methods".
- 2.11 GSO 148 “Sugar”.
- 2.12 GSO 23 "Colouring Matter Used in Foodstuffs".
- 2.13 GSO Standard ON (Methods of Test for Edible Starch)
- 2.14 GSO Standard ON (Edible Starch).
- 2.15 GSO 1320 " Soft Candy".
- 2.16 GSO ISO 2448 : 1994 (Fruit and Vegetable Products - Determination of Ethanol).
- 2.17 GSO ISO 6579 : 1994 (Microbiology - General Guide - Detection of Salmonella).
- 2.18 GSO 1310 / 2002 (Glucose Syrup).
- 2.19 GSO ISO 4832/1994 (Microbiology - General Guide for the Enumeration of
Coliforms - Colony Count Technique at 30°C).
- 2.20 GSO 842 "Microbiology - General Guide for the Enumeration of Yeasts and

Moulds - Colony Count Technique at 25°C".

- 2.21 GSO 1321 "Glucose".
- 2.22 GSO Standard ON (Testing for Pork Fat in Food Products).
- 2.23 GSO ISO 6651 : 1994 (Methods of Determination of Maximum Permitted of Mucotoxins in Feed Products - Aflatoxins).
- 2.24 GSO 263 (Hard Candy).
- 2.25 GSO 146/1994 (Methods of Testing for Sulphuric Acid Used in Food Preservation).
- 2.26 GSO 1306 "Methods of Microbiology Testing of Plant Baby Foods".

3. DEFINITIONS

Nougat candy (marzipan): The product of cooked sucrose and glucose under defined temperature with albumin, flavouring materials, nuts and sometimes honey with foaming agent and it shall be free from gelatin.

4. REQUIREMENTS

The following requirements shall be met in Nougat candy (marzipan):

- 4.1 All materials used shall comply with the relevant GSO standards for each material.
- 4.2 It shall be clean and free from foreign matter.
- 4.3 It shall have acceptable taste (according to each type).
- 4.4 It shall be free from pork products and its derivatives.
- 4.5 It shall be free from rancidity and off-odors.
- 4.6 It shall be free from insects and their fragments.
- 4.7 It shall have proper cracked texture.
- 4.8 It shall have a light white colour and distinctive taste.
- 4.9 Glucose shall not exceed 50% of the total sugars.
- 4.10 Moisture is not less than 6%.
- 4.11 It shall be free from filling matter such as flour and starch.
- 4.12 It shall be free from talcum powder.

- 4.13 The used nuts shall be free from rancidity, peels and insect fragments.
- 4.14 It may be packed in suitable wraps or packed without wrappings in suitable packets.
- 4.15 Contaminating metallic elements content shall not exceed the following:
- | | |
|-----------|---------|
| Arsenic : | 0.5 ppm |
| Lead : | 1.0 ppm |
| Copper : | 2.5 ppm |
| Zinc : | 2.5 ppm |
- 4.16 Aflatoxin shall not exceed 10 PPB.
- 4.17 Sulphuric dioxide ratio in the final product shall not exceed 350 ppm.
- 4.18 Production shall be carried out according to good manufacturing practices and shall be in accordance with the GSO standard mentioned in 2.3.
- 4.19 It shall be free from ethyl alcohol.
- 4.20 Optional ingredient shall be in accordance with the GSO standard mentioned in 2.24.
- 4.21 It shall be free from salmonella and coliform bacteria.
- 4.22 Number of yeasts and moulds shall not exceed 100/g.
- 4.23 Total count of bacteria shall not exceed 5000 microb/g.
- 4.24 Fat substances shall not be less than 10% in the final product and milk fat shall not be less than quarter of the fats used.
- 4.25 Food additives shall be in accordance with the standard mentioned in 2. 4.
- 4.26 Microbiological properties of the product shall be accordance with GSO standard mentioned in 2.6.

5. SAMPLING

Sampling shall be carried out according to the GSO standard mentioned in (2.24).

6. METHODS OF TEST

6.1 Tests

6.1.1 Sensory evaluation

It shall be evaluated according to the GSO standard mentioned in 2.5.

- 6.1.2 Detection of foreign matters
It shall be detected according to the GSO standard mentioned in 2.5.
- 6.1.3 Moisture determination
It shall be determined according to the GSO standard mentioned in 2.10.
- 6.1.4 Sugars determination
It shall be determined according to the GSO standard mentioned in 2.10.
- 6.1.5 Determination of contaminating elements
It shall be determined according to the GSO standard mentioned in 2.8.
- 6.1.6 Determination of starch
It shall be determined according to the GSO standard mentioned in 2.13.
- 6.1.7 Determination of non-organic matters
Talcum powder: It shall be calculated by the difference in ash determination by adding dilute hydrochloric acid to the ash then ash again. In case talcum powder is present, the ratio of soluble ash in the acid be high.
- 6.1.8 Determination of sulphur dioxide
It shall be determined according to the GSO standard mentioned in 2.25.
- 6.1.9 Detection of artificial sweeteners
Detection shall be carried out according to the GSO standard mentioned in 2.9.
- 6.1.10 Detection of colouring matter
Detection shall be carried out according to the GSO standard mentioned in 2.9.
- 6.1.11 Detection of rancidity
It shall be carried out according to the GSO standard mentioned in 2.7.
- 6.1.12 Detection of pork fat
It shall be carried out according to the GSO standard mentioned in 2.22.
- 6.1.13 Detection of ethanol
It shall be carried out according to the GSO standard mentioned in 2.16.
- 6.1.14 Detection of salmonella
It shall be carried out according to the GSO standard mentioned in 2.17.
- 6.1.15 Determination of yeasts and moulds
It shall be carried out according to the GSO standard mentioned in 2.20.
- 6.1.16 Determination of total count of bacteria
It shall be determined according to the GSO standard mentioned in 2.26.
- 6.1.17 Detection of coliform bacteria

It shall be carried out according to the GSO standard mentioned in 2.19.

6.1.18 Determination of aflatoxin

It shall be determined according to the GSO standard mentioned in 2.23.

6.2 Tests shall be carried out on the representative sample taken according to (5) to determine its compliance with all the items of this standard.

7 PACKAGING, TRANSPORTATION AND STORAGE

It shall consider the following:

7.1 Packaging

The product shall be packed in clean, suitable, sound, moisture proof, and sealed containers that have no effect on product properties.

7.2 Transportation

Transportation shall be carried out in such a way as to protect the product mechanical damage and contamination.

7.3 Storage

The product shall be stored under suitable conditions in ventilated stores.

8. LABELLING

Without prejudice to the provisions of the GSO standard mentioned in 2.1 and 2.2, the following shall be declared on the label of the product:

8.1 “Expiration date for all kinds of soft candy shall not be more than one year from production date”.

8.2 Food additives (if used).